

California Energy Commission  
**STAFF REPORT**

# **LOCALIZED HEALTH IMPACTS REPORT**

Addendum 18 for Selected Projects With Location Changes  
Awarded Funding Through the Alternative and Renewable  
Fuel and Vehicle Technology Program Under Solicitation  
PON-13-606 – Electric Vehicle Charging Infrastructure

**California Energy Commission**  
Edmund G. Brown Jr., Governor



February 2018 | CEC-600-2014-002-AD18

# California Energy Commission

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# ADDENDUM 18

The *Localized Health Impacts (LHI) Report for Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation PON-13-606* was posted April 11, 2014 (CEC-600-2014-002).<sup>1</sup> This addendum uses the same approach to assess the localized health impacts for two projects with location changes or added locations. Adopt-A-Charger proposes to replace five electric vehicle charging stations and add three backup station locations. The Bay Area Air Quality Management District proposes to add 17 backup electric vehicle charging station locations. The newly proposed locations are described in Table 1, along with environmental justice (EJ) indicators.<sup>2</sup> (See Appendix A.)

**Table 1: New Proposed Site Locations for Adopt-A-Charger and Bay Area Air Quality Management District, Along With Environmental Justice Indicators**

Grantee	Original Locations	New Site Locations	EJ Indictors for Locations
Adopt-A-Charger	Not Applicable	Kenneth Hahn State Recreation Area 4100 S. La Cienega Boulevard Los Angeles, CA 90056	Minority
Adopt-A-Charger	1 New Years Creek Road Pescadero, CA 94060	Heilbron House 704 O Street Sacramento, CA 95814	Poverty
Adopt-A-Charger	1500 Cloverdale Road Pescadero, CA 94060	Baldwin Hills Scenic Overlook 6300 Hetzler Road Culver City, CA 90232	Age
Adopt-A-Charger	Not Applicable	1700 Armstrong Woods Road Guerneville, CA 95446	Poverty
Adopt-A-Charger	101 N. Big Trees Park Road Felton, CA 95018	San Juan Bautista SHP 19 Franklin Street San Juan Bautista, CA 95045	Minority and Unemployment
Adopt-A-Charger	Not Applicable	Chino Hills State Park 4721 Sapphire Road Chino Hills, CA 91709	Minority

1 Brecht, Patrick, Jennifer Allen, and Lindsee Tanimoto. 2014. *Localized Health Impacts Report*. California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2014-002.

2 The EJ indicators follow: (i.) minority subset represents more than 30 percent of a given city's population (2010), (ii.) city's poverty exceeds California's poverty level of 15.8 percent (2012-2016), (iii.) city's unemployment rate exceeds California's unemployment rate of 4.3 percent as of December 2017, and (iv.) city's percentage of persons younger than 5 years of age or older than 65 years of age is 20 percent higher than California's average. For the entire state, the percentage of persons under the age of 5 years is 6.8 percent, and the percentage of persons over the age of 65 years is 11.4 percent.

<b>Grantee</b>	<b>Original Locations</b>	<b>New Site Locations</b>	<b>EJ Indicators for Locations</b>
Adopt-A-Charger	21601 Pacific Coast Highway Huntington Beach, CA 92646	Seacliff State Beach State Park Drive Aptos, CA 95003	Unemployment
Adopt-A-Charger	8471 N. Coast Highway Laguna Beach, CA 92651	California State Railroad Museum 125 I Street Sacramento, CA 95814	Poverty
Bay Area Air Quality Management District	Not Applicable	700 Los Altos Avenue Los Altos, CA 94022	Age
Bay Area Air Quality Management District	Not Applicable	770 Berry Avenue Los Altos, CA 94024	Age
Bay Area Air Quality Management District	Not Applicable	1501 Oak Avenue Los Altos, CA 94024	Age
Bay Area Air Quality Management District	Not Applicable	550 Almond Avenue Los Altos, CA 94022	Age
Bay Area Air Quality Management District	Not Applicable	25890 Fremont Road Los Altos, CA 94022	Age
Bay Area Air Quality Management District	Not Applicable	1120 Covington Road Los Altos, CA 94024	Age
Bay Area Air Quality Management District	Not Applicable	201 Covington Road Los Altos, CA 94024	Age
Bay Area Air Quality Management District	Not Applicable	100 W Portola Avenue Los Altos, CA 94022	Age
Bay Area Air Quality Management District	Not Applicable	1120 Rose Avenue Mountain View, CA 94040	None
Bay Area Air Quality Management District	Not Applicable	1719 Franklin Street/415 19 <sup>th</sup> Street Oakland, CA 94612	Poverty
Bay Area Air Quality Management District	Not Applicable	388 9 <sup>th</sup> Street Oakland, CA 94607	Poverty

Grantee	Original Locations	New Site Locations	EJ Indicators for Locations
Bay Area Air Quality Management District	Not Applicable	1200 Harrison Street Oakland, CA 94612	Poverty
Bay Area Air Quality Management District	Not Applicable	6235 La Salle Avenue Oakland, CA 94611	Poverty
Bay Area Air Quality Management District	Not Applicable	3720 Grand Avenue Oakland, CA 94610	Poverty
Bay Area Air Quality Management District	Not Applicable	4050 Howe Street Oakland, CA 94611	Poverty
Bay Area Air Quality Management District	Not Applicable	3400 Dimond Avenue Oakland, CA 94602	Poverty
Bay Area Air Quality Management District	Not Applicable	375 Beale Street San Francisco, CA 94105	Minority

Source: California Energy Commission staff

## Air Quality and EJ Indicators

The newly proposed station locations (electric vehicle charging stations) are all in nonattainment zones for ozone, particulate matter (PM<sup>3</sup>) 2.5, and PM 10. If a project site is in a nonattainment zone and has more than one EJ indicator, as shown in Table 1, with detail in Table 2, it is considered a high-risk community, according to the Environmental Justice Screening Method.<sup>4</sup> According to staff's assessment, San Juan Bautista is considered a high-risk community.

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<sup>3</sup> "Particulate matter" is unburned fuel particles that form smoke or soot and stick to lung tissue when inhaled. The numbers stand for microns in diameter.

<sup>4</sup> California Air Resources Board (ARB), *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

**Table 2: Environmental Justice (EJ) Indicators Compared With California**  
The yellow highlighted area indicates numbers (percentages) that meet the definition for EJ indicators

	<b>Below Poverty Level (2012-2016)</b>	<b>Black Persons (2010)</b>	<b>American Indian and/or Alaska Native (2010)</b>	<b>Asian and/or Pacific Islander (2010)</b>	<b>Persons of Hispanic or Latino Origin (2010)</b>	<b>Persons Under 5 Years of Age (2010)</b>	<b>Persons Over 65 Years of Age (2010)</b>	<b>Unemployment (December 2017)</b>
California	15.8%	6.2%	1.0%	13.0%	37.6%	6.8%	11.4%	4.3%
EJ Indicator Threshold	>15.8%	>30%	>30%	>30%	>30%	>8.16%	>13.8%	>4.3%
Aptos	5.9%	0.9%	0.7%	4.0%	9.8%	4.6%	7.9%	6.3%
Chino Hills	6.7%	4.6%	0.5%	30.3%	29.1	5.8%	7.0%	2.9%
Culver City	7.6%	11.4%	1.5%	17.8%	23.2%	5.3%	14.9%	3.0%
Guerneville	19.2%	0.7%	1.5%	0.1%	12.2%	3.5%	13.5%	3.6%
Los Altos	3.3%	0.5%	0.2%	23.5%	3.9%	5.4%	20.0%	1.7%
Los Angeles (zip code 90056)	6.0%	75.8	0.3%	3.3%	5.8%	3.8%	22.1%	4.2%
Mountain View	8.7%	2.2%	0.5%	26.0%	21.7%	7.1%	10.6%	2.0%
Oakland	20.0%	28.0%	0.8%	16.8%	25.4%	6.7%	4.7%	3.7%
Sacramento	21.4%	14.6%	1.1%	18.3%	26.9%	7.5%	4.4%	4.1%
San Francisco	12.5%	6.1%	0.5%	33.3%	15.1%	4.4%	13.6%	2.3%
San Juan Bautista	7.5%	0.6%	3.1%	2.8%	48.7%	6.7%	4.8%	6.7%

Sources: Unemployment information from the State of California, Employee Development Department Labor Market Information Div.: <http://www.labormarketinfo.edd.ca.gov/data/unemployment-and-labor-force.html#Tool>. U.S. Census Bureau, <http://www.census.gov/quickfacts/table/PST045215/0664000.06.00>, and [http://factfinder.census.gov/faces/nav/jsf/pages/community\\_facts.xhtml](http://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml).

## Location Analysis and Community Impacts

The proposed station locations were assessed according to the original LHI. The environmental justice indicators are comparable to the original set of station locations. The charger quantity and type, along with the estimated gasoline gallons displaced, are also comparable, and the anticipated impact to the communities where the electric vehicle chargers will be located remains positive in terms of cleaner air and anticipated greenhouse gas reductions.

# APPENDIX A:

## Localized Health Impact Report Assessment Method

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This LHI Report assesses the potential impacts to communities because of the projects proposed by the ARFVTP. This report is prepared under the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider environmental justice consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting.

This LHI Report is not intended to be a detailed environmental health impact analysis of proposed projects nor is it intended to substitute for the environmental review conducted during the California Environmental Quality Act (CEQA) review. This LHI Report includes staff's application of the Environmental Justice Screening Method (EJSM) to identify projects located in areas with social vulnerability indicators and the greatest exposure to air pollution and associated health risks.<sup>5</sup>

The EJSM was developed to identify low-income communities highly affected by air pollution for assessing the impacts of climate change regulations, specifically Assembly Bill 32 (Núñez, Chapter 488, Statutes of 2006), the California Global Warming Solutions Act of 2006. The EJSM integrates data on (1) exposure to air pollution, (2) cancer risk, (3) ozone concentration, (4) frequency of high ozone days, (5) race/ethnicity, (6) poverty level, (7) home ownership, (8) median household value, (9) educational attainment, and (10) sensitive populations (populations under 5 years of age or over 65 years of age).

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<sup>5</sup> California Air Resources Board (ARB). *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

To determine high-risk communities, environmental justice (EJ) indicators for locations of the electric vehicle charging stations are compared to data from the U.S. Census Bureau or other public agency. Staff identifies high-risk communities by using a two-part standard. For a community to be considered high-risk, for this assessment, it must meet both Parts 1 and 2 of this standard.

*Part 1:*

- Communities located in nonattainment air basins for ozone, PM 2.5 or PM 10

*Part 2:*

- Communities having more than one of the following EJ indicators: (1) minority, (2) poverty, (3) unemployment, and (4) high percentage of population under 5 years of age and over 65 years of age. The EJ indicators follow:
  - A minority subset represents more than 30 percent of a given city's population.
  - A city's poverty level exceeds California's poverty level.
  - A city's unemployment rate exceeds California's unemployment rate.
  - The percentage of people living in that city are younger than 5 years of age or older than 65 years of age is 20 percent higher than the average percentage of persons under 5 years of age or over 65 years of age for all of California.